

REMARKS

Summary Of The Office Action & Formalities

Claims 1-3 and 8-11 are all the claims pending in the application. By this Amendment, Applicants are amending claims 3, 9 and 10. No new matter is added.

Applicants thank the Examiner for acknowledging their claim to foreign priority and for confirming that the certified copy of the priority document was received.

Claims 3, 9 and 10 are rejected under 35 U.S.C. § 112, second paragraph, for the reason set forth at page 2 of the Office Action. Applicants are amending the claims to overcome this rejection. Applicants' amendments to the claims are not intended nor considered to be narrowing amendments surrendering any equivalents.

Claims 1, 8 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kanoh et al. (USP 5,669,025), Grandmont et al. (USP 5,781,093) and Adams et al. (USP 5,142,767).

Claim 2 is indicated as being allowable if rewritten in independent form.

Claims 3, 9 and 10 would be allowable if rewritten to overcome the Section 112 rejection in independent form.

Applicants respectfully traverse the prior art rejection.

Claim Rejections - 35 U.S.C. § 103

1. Claims 1, 8 and 11 In View Of Kanoh et al., Grandmont et al. And Adams et al.

In rejecting claims 1, 8 and 11 in view of Kanoh et al., Grandmont et al. and Adams et al., the grounds of rejection state that

Regarding Claim 1, Kanoh discloses a method of obtaining a module comprising: forming a stacked assembly by stacking a

plurality of aligned modular printed circuit film elements (dielectric substrates 2, 3) carrying a set of turns of two conductive tracks in which each of the track form part of an inductive winding (circuit patterns 4, 5) and where each of the tracks terminate at an edge of the film element (see Fig. 1); cutting the block laterally along the stacked assembly to expose an end for each of the tracks at a common alignment level (shown in Fig. 4); and creating connections 2e, 3e on one face of the cut block to connect the tracks to connection means external to the module (see col. 1, lines 63-64).

Regarding Claim 8, the claimed "first support" and "second support" is read as dielectric substrate 2 and dielectric substrate 3, respectively.

Regarding Claim 11, the first and second conductive tracks 4, 5 of Kanoh terminate at the edges of each support 2, 3 (as shown in Fig. 1) prior to the step of stacking.

Kanoh teaches substantially all of the limitations of the claimed manufacturing method except molding an insulative material over the stacked assembly to form a rigid block.

Adams teaches that molding an electrically insulating material over an inductive module to encapsulate is conventional and well known in the manufacturing arts.

Grandmont teaches that encapsulating an inductive module provides an impervious seal to moisture (see col. 3, lines 19-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Kanoh by including the step of molding, as taught by Adams and Grandmont, to advantageously provide a module that is rigid, sealed and impervious to moisture.

Office Action at pages 3-4. Applicants respectfully disagree and submit that the Examiner has not accounted for all the limitations in the rejected method claims. In particular, the Examiner has not shown that the applied art provides the requisite motivation to modify the

structure of Kanoh et al. to obtain the claimed invention. Furthermore, the Examiner has not shown that the prior art references when combined teach or suggest all the claim limitations.

Specifically, the Examiner alleges that Kanoh et al. discloses the step of cutting the rigid block, but fails to teach the step of molding an insulative material over the stacked assembly to form the rigid block. Therefore, the Examiner relies on Adams and Grandmont to argue that it would have been obvious to include the step of molding a material over the stacked assembly. However, as clearly recited in claims 1 and 8, the step of molding the insulating material to form a block is performed before the step of cutting the block to expose an end of a conductive track.

On the other hand, in Kanoh et al., even if one were to mold insulating material over the chip-type filter, it is clear that the dicing operation to mass produce the chip-type filters would occur before any insulating material is molded over the chip. That is, molding the insulating material would be performed after the step of dicing.

Indeed, there is absolutely no teaching or suggestion in any of the applied references to perform the step of molding before dicing the mother chip body 24 of Kanoh et al. To the contrary, as the Examiner acknowledges, one skilled in the art would have allegedly found it obvious to include the step of molding “to advantageously provide a module that is rigid, sealed and impervious to moisture.” This motivational rationale directly teaches away from performing the molding step before the cutting step, since the latter would expose the chip to moisture. Therefore, based on the Examiner’s rationale, it would be counterintuitive to adopt Applicants’ method steps as recited in claims 1 and 8 to produce the chips of Kanoh et al.

In view of at least the foregoing distinctions, the Examiner is kindly requested to reconsider and withdraw the prior art rejections of claims 1, 8 and 11.

U.S. APPLICATION NO. 09/628,804
AMENDMENT UNDER 37 C.F.R. § 1.111

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



Raja Saliba
Registration No. 43,078

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: August 30, 2002

APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

Claim 3. (Twice Amended) The method claimed in claim 1 wherein at least one orifice is formed in [the] a same position in each of the modular printed circuit film elements to form a conduit in the stacked assembly enabling a core to be inserted through said stacked assembly.

Claim 9. (Amended) The method claimed in claim 8, further comprising the steps of:
providing a supplementary support that carries an electrical component and that has a conductive track terminating at or near an edge of the supplementary support;

prior to molding the insulative material over the stacked assembly to form [a] the block, stacking the supplementary support with the first support and the second support so that the stacked assembly includes the supplementary support, the first support, and the second support, and so that the step of cutting the block laterally along the stacked assembly exposes respective ends of the conductive tracks on the supplementary support, the first conductive tracks and the second conductive tracks at the common alignment level and so that the respective exposed ends are flush with one face of the block.

Claim 10. (Amended) The method claimed in claim 8, wherein at least one orifice is formed in [the] a same position in each of first and second supports to form a conduit in the stacked assembly enabling a core to be inserted through the stacked assembly.